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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,032	10/15/2003	Nancy J. Tolan	05918-322001	2173
26161	7590	07/31/2006	EXAMINER	
FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			RODRIGUEZ, RUTH C	
			ART UNIT	PAPER NUMBER
			3677	

DATE MAILED: 07/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/688,032	Applicant(s) TOLAN ET AL.	
	Examiner Ruth C. Rodriguez	Art Unit 3677	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 May 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5-20,22-37 and 39-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-20,22-37 and 39-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 7-20, 24-37 and 39-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kingsford et al. (US 6,851,161 B2) in view of Provost et al. (US 4,984,339) and Kennedy et al. (US 6,248,419 B1).

Kingsford discloses a releasable touch fastener (10) comprising a loop component (12) and a hook component (14). The loop component has a sheet-form loop base and an array of female fastener elements (16) extending from the loop base. The hook component has a sheet-form base and an array of male fastener elements (18) extending from the base and releasably engaging the female fastener elements of the loop component (Figs. 1, 1A and 3-7). The touch fastener has an engaged thickness of less than about 0.11 inch (C. 3, L. 63-65). Kingsford further comprises a male seal profile portion (22,74,94) that engages a female seal profile portion (20,70,90). Kingsford fails to disclose that the releasable touch fastener has hook and loop components provided with a Final Peel Resistance of at least 0.3 pounds per inch

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of closure width. However, Provost teaches a releasable touch fastener comprising a loop component (48,50) and a hook component (20). The loop component has a sheet-form loop base (48) and an array of female fastener elements (50) extending from the loop base. The hook component has a sheet-form base (24) and an array of male fastener elements (22) extending from the base and releasably engaging the female fastener elements of the loop component (Figs. 17-24). The hook and loop components are provided with a Final Peel Resistance of at least 0.3 pounds per inch of closure width (Table III for all materials illustrated). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a releasable touch fastener provided with at least 0.3 pounds per inch of closure width as taught by Provost in the fastener disclosed by Kingsford since hook and loop components having at least 0.3 pounds per inch of closure width are well known in the art as taught by Provost and will help to retain some tension necessary to create some compression between the male and female seal profile portions to create a better seal for the closure (C. 4, L. 61-67 and C. 5, L. 1). Provost also teaches that:

- The hook and loop components provide an Initial Peel Resistance of at least 0.5 pounds per inch of closure width (Table III for all materials illustrated).
- The hook and loop components provide an Initial Shear Resistance of at least 10 pounds per square inch (Table III for all materials illustrated).
- The hook base comprises a sheet of resin and the male fastener elements have stems extending contiguously from the sheet of resin (Figs. 11-25).
- The male fastener elements have molded crooks (Figs. 11-25).

- The fastener elements are arranged in a density of 350 fastener elements per square inch of the base (C. 9, L. 61-67).
- The stems have opposing surfaces defined by severed resin (Figs. 11-25).
- The Final Peel Resistance is at least 0.4 pound per inch of closure width (Table III for all materials illustrated).
- The Final Peel Resistance is at least 0.5 pound per inch of closure width (Table III for all materials illustrated).

Kingsford and Provost fail to disclose that each male fastener elements has two crooks extending in opposite directions along the hook base. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have each male fastener elements has two crooks extending in opposite directions along the hook base because the Examiner takes Official Notice that the use of loop components having woven fabric is well known in the art.

Kingsford and Provost disclose the details of the hook component. Kingsford and Provost fail to disclose that the loop component comprises a woven fabric. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a woven fabric because the Examiner takes Official Notice that the use of loop components having woven fabric is well known in the art.

Kingsford also discloses that:

- The Engaged Thickness is less than 0.10 inch (C. 3, L. 63-65).
- The Engaged Thickness is less than 0.09 inch (C. 3, L. 63-65).
- The Engaged Thickness is less than 0.08 inch (C. 3, L. 63-65).

For claim 19, a combination of rejections of claims 1 and 2 will result in the limitations of claim 19 without taking into consideration the Final Peel Resistance of at least 0.3 pound per inch of closure width.

Provost also teaches that:

- The Initial Peel Resistance is at least 0.6 pound per inch of closure width (Table III for all materials illustrated).
- The Initial Peel Resistance is at least 0.69 pound per inch of closure width (Table III for all materials illustrated).
- The Initial Peel Resistance is at least 0.8 pound per inch of closure width (Table III for all materials illustrated).

For claim 37, a combination of rejections of claims 1 and 3 will result in the limitations of claim 37 without taking into consideration the Final Peel Resistance of at least 0.3 pound per inch of closure width.

Provost also discloses that:

- The Initial Shear Resistance is at least 15 pound per square inch (Table III for most of the materials illustrated).
- The Initial Shear Resistance is at least 20 pound per square inch (Table III for most of the materials illustrated).
- The Initial Shear Resistance is at least 25 pound per square inch (Table III for most of the materials illustrated).

3. Claims 5, 6, 21, 22, 39, 40 and 55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kingsford et al. in view of Provost et al. as applied to claim 1, 19 and 37 above, and further in view of Kennedy et al. (US 6,248,419 B1).

Kingsford and Provost fail to disclose that the hook component has a Stitch Hole Tear Strength of at least 2.0 pounds. However, Kennedy teaches a releasable touch fastener comprising a hook component (20,21). The hook component has a sheet-form base (20) and an array of male fastener elements (21) extending from the base and releasably engaging female fastener elements (Fig. 6). The base has a fabric backing (25) at a side of the hook base opposite the fastener elements (Fig. 6). The fabric backing adds strength to the base and also provides a substantial modification of the base of the hook component (C. 6, L. 3-8). Such reinforcement can provide a Stitch Hole Tear Strength of at least 2.0 pounds. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a fabric backing at a side of the hook base opposite the fastener elements of the hook component as taught by Kennedy in the touch fastener disclosed by Kingsford and modified by Provost so that the hook component can have a Stitch Hole Tear Strength of at least 2.0 or 5.0 pounds. Doing so, adds strength to the base and also provides a substantial modification of the base of the hook component that can suffer tear by repeated use of the touch fastener.

Kingsford and Provost fail to disclose that hook base includes a fabric backing laminated to a side of the hook base opposite the fastener elements. However, it would have been obvious to one having ordinary skill in the art at the time the invention was

made to have a hook base includes a fabric backing laminated to a side of the hook base opposite the fastener elements because the Examiner takes Official Notice that the use of loop components having woven fabric is well known in the art.

### ***Response to Arguments***

4. Applicant's arguments filed 15 May 2006 have been fully considered but they are not persuasive.

5. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., describe the type of loop material used in his closure and that the closure is a strong closure) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

6. The Applicant argues "Just because Provost's hooks can provide high peel and/or shear resistance under certain circumstances does not mean that applying Provost's hooks to Kingsford's low profile would result in a low profile closure exhibiting high peel and/or shear resistance." The Examiner fails to be persuaded by this argument because Kingsford never discloses a low profile closure. Additionally, even if one were to consider that the closure is low profile closure there that does not preclude



the use of the hook element taught by Provost since the hook height is approximately 0.05 inches.

7. The Applicant also argues that there is way to determine whether the peel resistance disclosed by Provost is initial peel resistance or final peel resistance and that the values presented in Table III are obtained from using different loop components. This argument fails to persuade. The peel resistance values presented by Provost in Table III represent values from making the hook component of different materials and not from using different types of loop component. Additionally, it is irrelevant whether the peel resistance values are final peel resistance or initial peel resistance because the table illustrates that the values go from 0.87 to 2.81 that is a greater value than the final peel resistance of 0.3 pounds per inch or the initial peel resistance of 0.5 pounds per inch. It would be obvious to one having ordinary skill in the art at the time of Applicant's invention that the values from table III can be considered either the initial peel resistance or the final peel resistance because the peel resistance values are considerably higher than the claimed values and even when one considers that the peel resistance is the initial peel resistance the claim limitation will be met since the peel resistance values are considerably higher than the claimed values and the loss of peel resistance can not provide for a value below the claimed values.

8. Regarding claims 5, 6, 21, 22, 39, 40 and 55-57, the Applicant argues that simply providing a scrim to a mold fastener will not yield the stitch hole tear strength being claimed by the Applicant. The Examiner fails to be persuaded by this argument. The use of a scrim to mold the fastener will increase the strength of the hook base and

therefore will provide high values of stitch hole tear strength because the scrim will provide resistance against tear of the hook base. One of ordinary skill in the art at the time of Applicant's invention will acknowledge that using a reinforcement for the hook base will provide high values of tear strength since the scrim works as a reinforcement for the hook base and prevent tear.

9. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nestergard (US 4,894,060), Wood et al. (US 4,973,326), Kennedy et al. (US 6,248,419), Martin et al. (US 2002/0042601 A1) and Vanbenschoten et al. (US 2003/0121128 A1) are cited to show state of the art with respect to touch fasteners having some of the features being claimed by the current application.

Wessels et al. (US 5,620,759), Sakakibara et al. (US 5,702,797) and Kennedy et al. (US 6,248,419) are cited to show state of the art with respect to using fabric sheets to reinforce a base of a hook component.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C. Rodriguez whose telephone number is (571) 272-7070. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075.

Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-6640.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ruth C. Rodriguez  
Patent Examiner  
Art Unit 3677

rcr  
July 24, 2006

  
**ROBERT J. SANDY**  
**PRIMARY EXAMINER**